

Amendments to the Specification

Please replace the title as follows:

~~SUCTION NOZZLE, METHOD OF DETECTING HOLD POSITION OF ELECTRIC
COMPONENT, METHODS OF DETECTING BENDING AND ANGULAR POSITION OF
SUCTION PIPE, AND ELECTRIC-COMPONENT HANDLING DEVICE~~

Please replace paragraph [0078] with the following rewritten paragraph:

[0078] The present electric-component mounting system 12 includes ~~a control device~~an image data processing device, such as control device 150 shown in the block diagram of Fig. 4. The control device is principally constituted by a computer 160 incorporating a processing unit (PU) 152, a read-only memory (ROM) 154, a random-access memory (RAM) 156 and a bus interconnecting those devices 152, 154, 156. To the bus of the computer 150, there is connected an input-output interface 162 which in turn is connected to the CCD cameras 56, 120, encoders 166, 168, 170, 172, and other devices. The encoders 166-172 are rotary position detecting devices arranged to detect the angles of rotation of the X-axis drive motor 38, Y-axis drive motor 44, vertical drive motor 92 and rotary drive motor 100, respectively. In the present embodiment, the encoders 166-172 are of absolute type.

Please replace paragraph [0084] with the following rewritten paragraph:

[0084] After the new suction nozzle 60 has been held by the nozzle holder 62, the nozzle holder 62 is first rotated by the rotary drive motor 100 until the angle of rotation as detected by the encoder 172 is zeroed. At this time, the suction nozzle 60 is placed at its uppermost position. In this state, the nozzle holder 62 holding the suction nozzle 60 is moved to a predetermined image-taking position right above the CCD camera 120, and the strobe light 122 is activated to enable the image-taking device 118 to take images of the lower end face 88 of the suction pipe 84 and the fiducial mark 90. In the present embodiment, the image-taking position is a position in which the nozzle axis which is the axis of rotation of

the nozzle holder 62 is aligned with the center of the imaging area 126 of the CCD camera 120 (with the center of the CCD matrix 126). This image-taking position is established by moving the relative movement device (not shown) which moves the XY robot 48 by operating the X-axis and Y-axis drive motors 34, 44 until the angular positions represented by the output signals of the encoders 166 168 have reached predetermined values corresponding to the image-taking position. When the XY robot 48 is stopped with the motors 34, 44 being turned off, however, the axis of the nozzle holder 62 thus positioned in the XY plane more or less deviates from the center of the imaging area 126 of the CCD camera 120, due to manufacturing and assembling errors of the electric-component mounting system 12. Accordingly, the nozzle axis A (axis of rotation of the suction pipe 84) more or less deviates from the center of the imaging area 126, as indicated in Fig. 5A.

Please replace the Abstract with the attached substitute Abstract.